

A NEW SPECIES OF THE GENUS *PARATANAIS*
(CRUSTACEA: TANAIIDACEA), *P. SPINANOTANDUS*,
FROM SEAMOUNT VEMA

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Abstract.—A new species, *Paratanais spinanotandus* n. sp., is described from South African waters. Relationship to other species of the genus is discussed briefly.

Introduction

While working on a revision of the family Paratanaidae, it was necessary to get as much material as possible of each taxon in the family. In this way I also received material of a species belonging to the genus *Paratanais*. Because this species is so easily recognized it is described here. The phylogenetic relationship of this species as well as that of the other members of the genus will be discussed in a separate paper.

Paratanais spinanotandus, new species

Material.—2 ♀♀, Sta. VEM 34 H, University of Cape Town Ecological Survey, 1978. Seamount Vema, South Atlantic Ocean, 31°38'S, 8°02'E, 39 m, holotype ♀ USNM 184553, paratype (dissected) ♀ USNM 184554.

Etymology.—From the Latin “spina” (spine) + “notandus” (remarkable).

Description.—(paratype):

Body: Robust, nearly 5 times longer than broad, length about 3 mm (Fig. 1).

Cephalothorax: Broader than long, narrowing from posterior to anterior, with 2 well separated eye-lobes; large zones of the cephalothorax less calcified, forming 4 “plates,” one “frontal plate” reaching rostrum from one eye-lobe to the other and going backwards to the middle of cephalothorax, 2 “lateral plates” covering the respiratory chamber and one “caudal plate” lying between the “lateral plates.”

Peraeonites: All peraeonites laterally rounded in dorsal view; first 3.6 times broader than long, rostral border near each side with indenture (for respiratory current?); second peraeonite 2.7 times, third 2.3 times, fourth and fifth 2.2 times broader than long; sixth peraeonite of same size as third.

Pleon: Consisting of 5 separate pleonites and pleotelson; all pleonites small, 6.8 times broader than long; pleotelson normally developed, without any distinctive character.

Antenna 1 (Fig. 1): Four-jointed; first joint stout, only 1.7 times longer than broad, outer border with only one small distal seta, inner border with 2 feathered hairs at the middle and 3 feathered hairs and one seta at distal third; second joint as long as broad, with 3 feathered hairs and 2 setae distally; third also as long as broad, inner and outer border each with one seta distally; fourth joint elongate, 4.4 times longer than broad, longer than second and third joint combined, with 2 feathered hairs, 2 smaller and 4 longer setae, and one aesthetasc.

Antenna 2 (Fig. 1): Six-jointed; first joint triangular in cross-section, fused with cephalothorax; second large, also triangular in cross-section, 1.4 times longer than broad, outer border with one seta distally, inner border with one small seta at the middle; third joint triangular in cross-section, little broader than long, outer border with one large distal spine; fourth joint rounded in cross-section, 3.2 times longer than broad, with 2 feathered hairs and 2 small seta distally; fifth 2.5 times longer than broad, with one long distal seta; sixth joint small, conical, with 4 long and 2 shorter setae.

Labrum (Fig. 2): Hood-shaped, covered with fine hairs.

Mandibles (Fig. 2): Robust, pars molaris well developed, having crushing area surrounded with strong wall of which one third is notched; left mandible with strong crenulate lacinia mobilis and well developed pars incisiva; right mandible without lacinia mobilis, but strong crenulate pars incisiva.

Labium (Fig. 2): With inner and reduced outer lobe; inner lobe deeply incised in the middle, distal third covered with groups of tiny hairs.

Maxilla 1 (Fig. 2): With endite and uniarticulate palp; endite normal, with 9 terminal spines; palp as long as endite, with 2 setae.

Maxilla 2 (Fig. 2): Large, oval, lacking seta.

Maxilliped (Fig. 2): Without coxae, well developed; basis fused medially in proximal third, with one long seta near articulation of palpus; inner lobe large, broader than basis, with one seta and two membranous spinelike structures, border covered with some short seta as well as some groups of tiny hairs; palpus four-jointed; first only little longer than broad, no seta; second triangular, outer border with one seta, inner border with one long seta, one biciliate and one strong, serrate spine; third as long as broad, inner border with 3 strong, biciliate spines; fourth joint nearly twice as long as broad, with one seta at outer border and 5 biciliate spines at inner border.

Epignath (Fig. 2): Falciform, with tiny hairs at tip.

Cheliped (Fig. 2): Strong; coxa large, behind a proximal conjunction of the basis; latter 1.6 times longer than broad, no seta; merus triangular, elongate and reaching nearly to distal border of carpus, with one rostral seta; carpus also 1.6 times longer than broad, tergal border with one proximal and one distal seta, sternal border with one rostral seta distally; propodus of normal size, fixed finger with strong spine at end, colored brown-red, tergal border with 3 rostral setae, sternal border with one rostral seta,

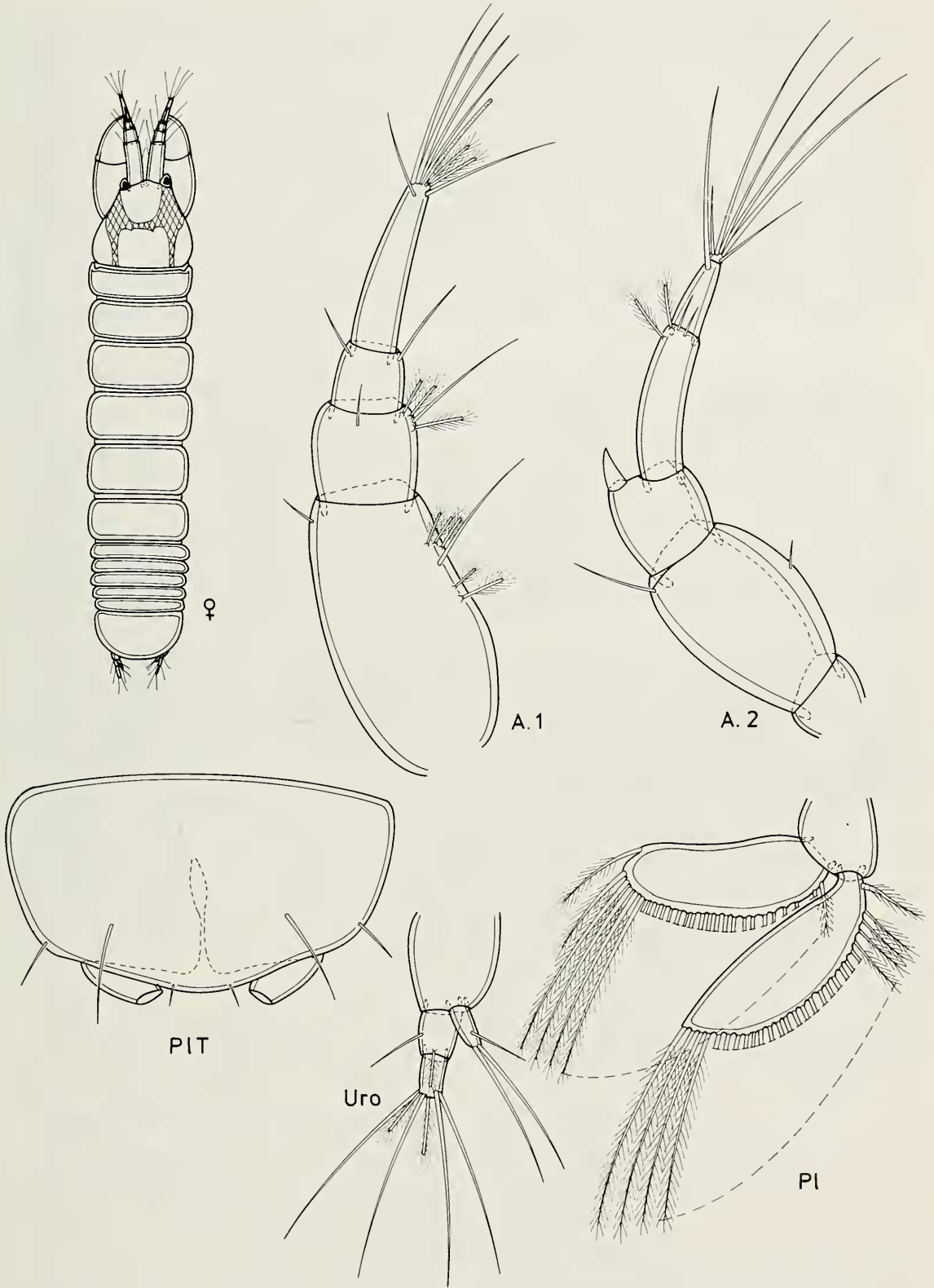


Fig. 1. *Paratanaid spinanotandus*, female, paratype.

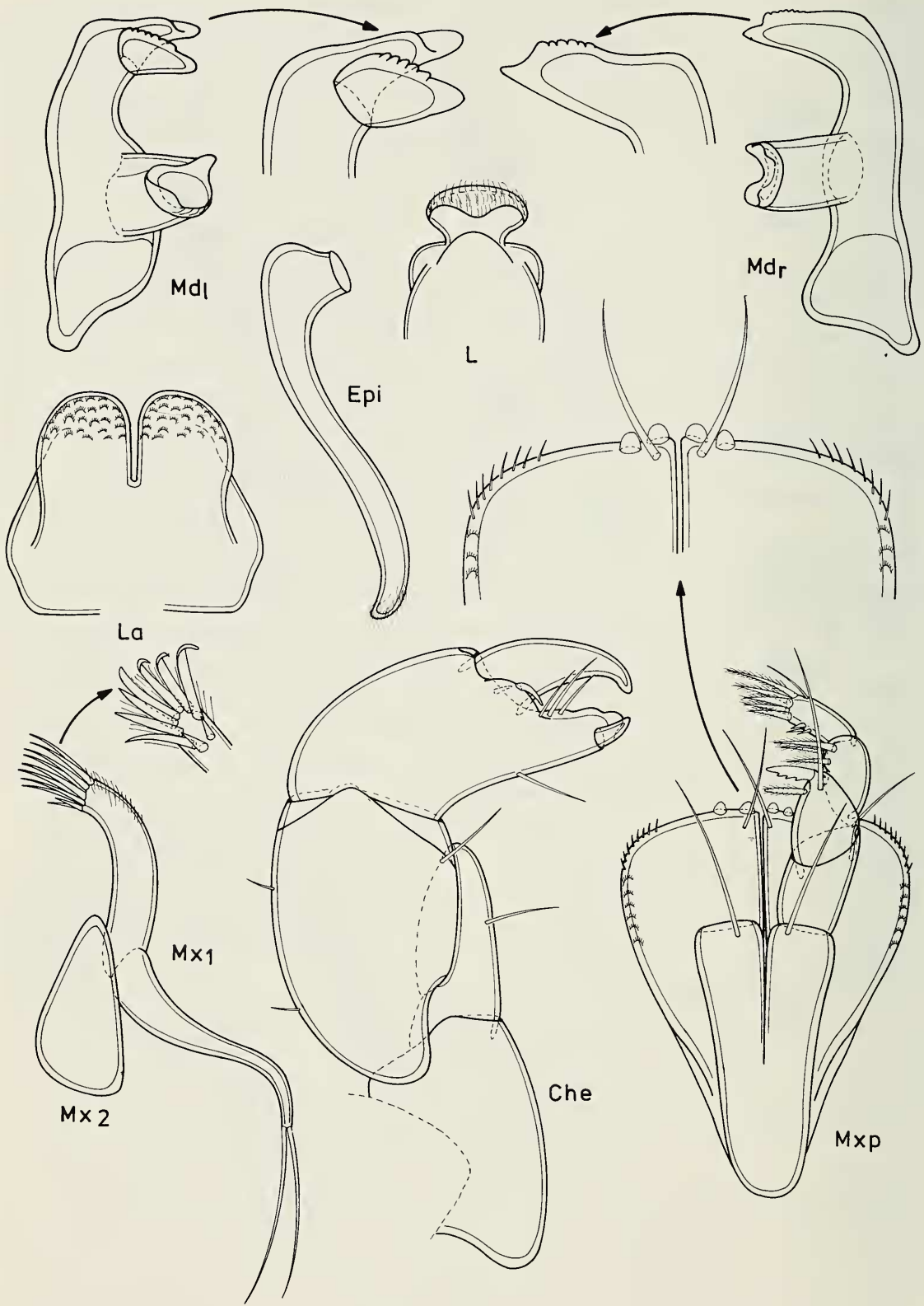


Fig. 2. *Paratanaeis spinanotandus*, female, paratype.

with one feathered, tiny caudal spine near articulation of dactylus representing the "comb"; dactylus strong, curved, tip colored brown-red, no seta.

Peraeopod 1 (Fig. 3): Slender, coxa more or less fused with peraeonite, with one seta; basis slender, 6.2 times longer than broad, no seta; ischium small, with one tergal seta; merus elongate, 4 times longer than broad and longer than propodus, no seta; carpus 2.2 times longer than broad, sternal border with one distal seta; propodus 5.5 times longer than broad, tergal border with one distal seta and sternal border with two small and one longer distal seta; dactylus with spine, reaching nearly the length of propodus, with one small seta proximally.

Peraeopod 2 (Fig. 3): Developed normally; coxa fused with peraeonite, with one seta; basis 3 times longer than broad, sternal border with one proximal seta; ischium small, with one tergal seta; merus nearly twice as long as broad, tergal border with one caudal seta and one rostral spine distally; carpus 1.7 times longer than broad, tergal border with one small rostral and caudal spine distally, sternal border with one small seta; propodus 3.8 times longer than broad, tergal border with one distal seta; dactylus and spine together reaching two-thirds of length of propodus, dactylus with proximal seta.

Peraeopod 3 (Fig. 3): Proportions and armament (except carpus) as in P.2; sternal border of carpus with one strong distal spine, tergal border with small rostral and caudal spine distally; propodus 4.6 times longer than broad.

Peraeopod 4 (Fig. 3): Stout; coxa fused with peraeonite, no seta; basis 2.2 times longer than broad, tergal border at distal third with one feathered hair and one seta; ischium small, with 2 tergal setae; merus curved sternally, 1.7 times longer than broad, tergal border with one rostral and caudal spine distally with some small rows of tiny spines nearby; carpus 1.3 times longer than broad, tergal and sternal border each with one rostral and caudal spine, sternal border with additional seta, tergal border covered with row of tiny spines; propodus twice longer than broad, tergal border covered with row of tiny spines and with rostral and caudal spine distally, sternal border with one strong feathered hair and one strong distal seta; dactylus and spine fused to claw, short.

Peraeopod 5 (Fig. 3): Proportions and armament as in P.4.

Peraeopod 6 (Fig. 3): Proportions and armament as in P.4/P.5; but proximal feathered hair at sternal border of propodus lacking; sternal border bearing 3 strong biciliate setae distally instead of one.

Pleopods (Fig. 1): All 5 pairs of pleopods similarly developed; basis as long as broad, no seta; exopod of one article, without setae on inner border, with many setae on outer border, most proximal one strongest, irregularly ciliated and separated by gap from the next one; endopod of one article,

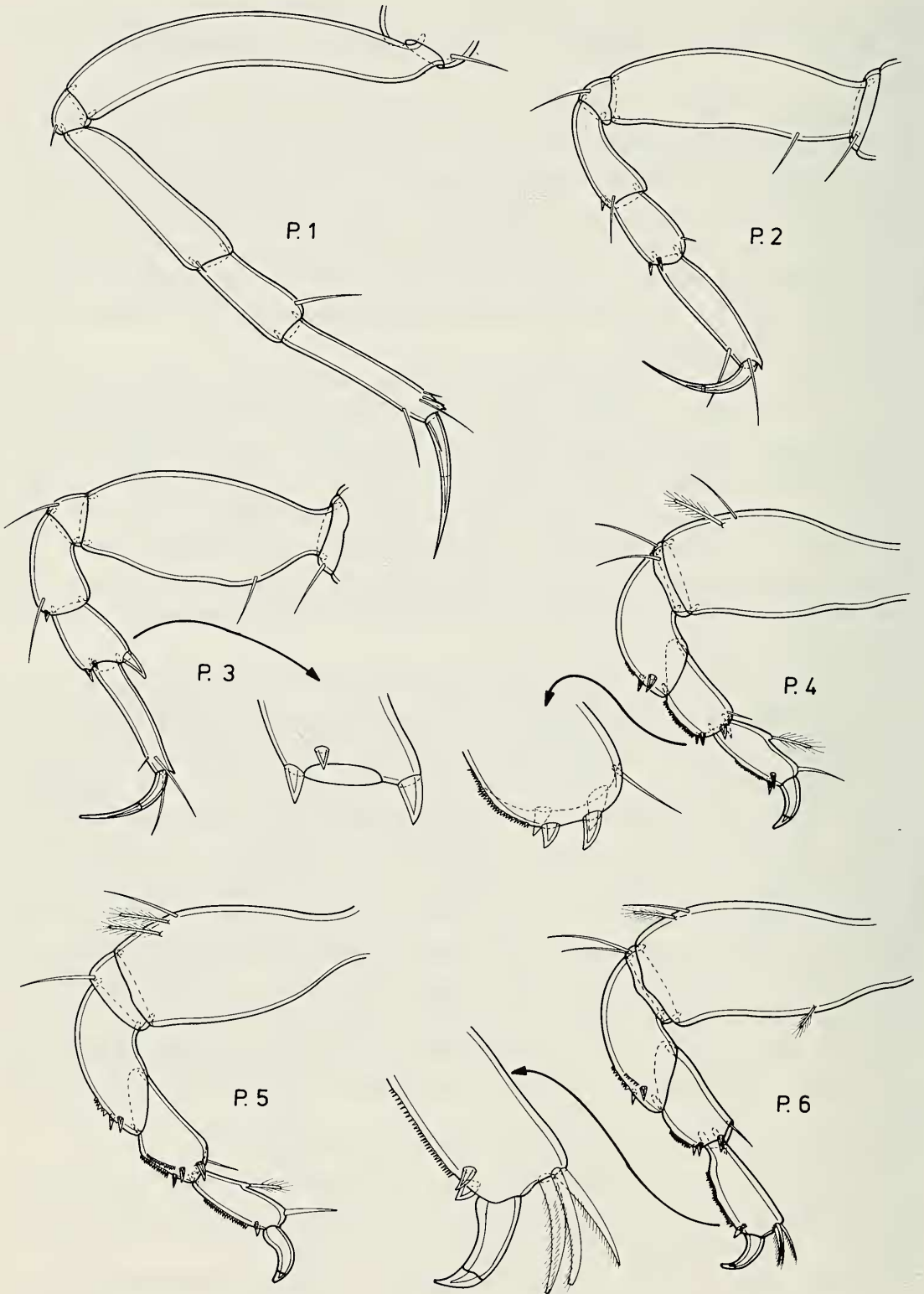


Fig. 3. *Paratanais spinanotandus*, female, paratype.

with one seta at distal inner border and many setae at outer border, distal seta shorter than following one and irregularly ciliated, most proximal one close to basis and separated by gap from next one.

Pleotelson (Fig. 1): Developed normally, 1.8 times broader than long, caudal point not prominent, with 2 small setae; with one long seta near articulation of uropods, additional seta at caudal corner.

Uropods (Fig. 1): Small and biramous; basis strong, but only 1.1 times longer than broad, no seta; endopodite short; 2-jointed, first joint 1.2 times longer than broad with one feathered hair and one seta, second 1.7 times longer than broad with 2 feathered hairs and 4 long setae distally; endopodite small, one-jointed, nearly 2.5 times longer than broad, but only reaching end of first joint of endopodite, with one seta at distal third (marking fusion of 2 former joints?) and with 2 distal setae.

Remarks.—This species is easily separated from all others of the genus by the serrate spine on the second joint of palpus of the maxilliped, which is unique. It also can be distinguished from *P. euelpis*, which has been described from South Africa (Cape Town; Cape St. Blaize N by E, 73 miles; Lion's Head/Table Bay) and refigured by Lang (1973: figs 18a–k, 19a–k), by the proportion of merus to propodus in the peraeopods and by the uropods. In *P. euelpis* the merus is shorter than the propodus, not longer as in *P. spinanotandus*. The uropods are more elongate in *P. euelpis* than in *P. spinanotandus*. It also should be mentioned that *P. elongatus*, *P. impressus* and *P. euelpis* appear to me to be identical. The distinctions mentioned by Kussakin and Tzareva (1972:242) are based on information given by Barnard (1920:330). But comparing *P. impressus* with the figures of a paratype of *P. euelpis* given by Lang (1973) these differences are not apparent. This synonymy with *P. elongatus* only can be verified by examination of new material from the type-locality, since the *Dana* material has been lost (Lang 1973:201).

Acknowledgments

The author expresses his appreciation to the Deutsche Forschungsgemeinschaft for funding his studies on the recent Tanaidacea. Grateful acknowledgment is made to Dr. B. Kensley for allowing me to examine the material of the University of Cape Town Ecological Survey and for reading the manuscript.

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